HOR732. Preservation *of* Fruits & Vegetables. Semester 2, 2021

—Case Study Review on Fiji's Sugar Sector Export. |Bio Deterioration Approach.

PREFACE.

I offer here toiled opinions with contempt as gratitude demanded are consciously muffled and deserving for any who share the same resemblance at its display. Promoting here the absence of self-regard will no further bring about the glory of authenticity or the delights of execution since the alignments of such the environment in which this testimonial became wholesome precipitate the difficulties of compression that overthrows balance while exerting the forces of labourism in academic duties. I propose this assignment not with intentions of pedagogues but with optimism that it influences the admiration found curtained by the laborious compressions habitual to the norms of academia experienced by all her companions. It is to earnestness, without mainstreams of rarity, that may there be a fruition of knowledge to all.

Vinaka.

CONTENTS.

1. Introduction
2. Methodology
    2.1. Export Market Research Methods: Market Ecology.
        2.2. Literature Review.
3. Findings
    3.1. Preliminaries of Fiji's—British Crown Installation and Origins of the Sugar Industry.
    3.2. Role of Bacteria in Sugar Losses and their Sanitary Measures.
        3.2.1. Preamble: Stance on the Sector's Research Literature Deficit.
            3.2.1.1. Outcomes of the Interaction between Bacteria and Sugar Contents.
4. Challenges and Recommendations.
5. List of Words Used.
6. *Footing*—References.

1. INTRODUCTION.

The chief commodity embracing a profound effect on domestic growth indicate distinct sanitary practice at post-harvest and milling levels. On this array, the appearance in treatments involved for sustaining the value of cane and sugar become motivated by bio deteriorative localities. As to the point of post harvesting, any crop irrespective of their mode of cultivation are subjected to deteriorate, where modified managerial strategies for the prolongation of quality ascends It is of no difference to sugarcane post-harvesting and milling management. The harvested crop and the final product abide by deteriorative laws—primarily governed by abiotic stresses, and the microbial population in provision of nature's rudimentary embodiment.

Dominance of the microbial population prevail whence the ability of mankind stands deprived of reductive efficacy. To this extent, the mode of control and their strategic approach takes stand to promote successive delight that

Student-Fredrick W. Kasami., ID No. 2017143923.
HOR732. Preservation of Fruits and Vegetables

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College of Agriculture, Fisheries & Forestry
Fiji National University

2. METHODOLOGY.

2.1. Export Market Research Methods: Market Ecology.

The market ecology research guide was employed inhere case study to enlighten areas in the export market necessary for investigation— Fiji's sugar sector. Hibbert's (1985) market ecology review, provides a set of principles that are laid as foundations for research and analysis of export market environments intended for those pursuing in trade professions. These were convenient for the accumulation of findings in section—3.1. The market ecology guide used for section—3.1, dedicate investigations on the export market environment. Which covers politics, demographics, and culture. The guide conditions the amateur to uncover statuses on; social power structure, legal system, military enforcement, role of ethnic minorities, and government fiscal policies. Other areas regarding culture are based on; educational levels, language, religious beliefs, and the concepts of time, and manners. Most of the assembled articulation's in section 3.1. were informed from texts that promote definitive elegance rendered in Fijian politics, demographics, and culture—authors such as Cumming *(1901)*, and Buchan *(1980)* were sufficient inspirations. However, the components of market ecology were regarded to some extent, as far as its portrayal in section 3.1.

2.2. Literature Review.

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3. FINDINGS.

3.1. Preliminaries of Fiji's—British Crown Installation and Origins of the Sugar Industry.

Fiji's regal appeal in cane and sugar production had been instrumentations of the British crown annexation. Beseeching Britannic fostering signified conflict between the early native kingdom and a cluster of westerners, whom, not only beheld intentions of diminishing freedom of beliefs and customs uttered by the inhabitants—indigenous people, and their paramount chiefs of the 19th century, but primarily demanded the kingdom's successor, compensate for crippling valued resources accidentally (Lawrence, 2014). The optimism of freedom that approached the lumen of oppression would become safeguarded and well-defined in the event of cession in 1874, with the instillation of colonialism exercised under her Majesty's authority and empire (Cummings, 1901). Colonial objectives remain apparent to empirical expansionism as motives were driven by demand for maritime and land resources with high competitiveness amongst distant countries of the European continent to sustain metropolis power, wealth, and economy (Fieldhouse, 1969).

Once a nation was annexed, the resources and goods produced supplemented, not only empirical territory, but also economic expansion hence the summing of all resources from their dominion became administered by colonial laws (Collier, 1905). Empirical Britain later fostered Fiji by her manner of civilisation in presenting the instruments of organised governance, constitutions, economics, religion, language, education, trade, and infrastructure while the native livelihood and customs integrated within became solely a functioning body of reformed distinctiveness and civilisation.

It was not for colonial motives of gaining expansion in resources but because the realm found sensibility in salvaging a people from felt oppression and freedom deprivation brought about by insincere governance of the previous (Cummings, 1901). The self-justifying consciousness of the native kingdom's successor verily signifies awareness, that even the fastidious sense of bigotry was countered to the strategic extent of fetching her Britannic assistance for its elimination. Thereafter, Fiji, as a colonial nation, would be pressed upon the efforts to build an economy without British assistance. A caveat was later given from the colonial office to the first Governor of Fiji, A. Gordon., Sir., about demand in British assistance for Fijian economic development. Lawrence (2014) proclaimed the unaccountability of the empire to assist the colony but rather have it resort to self-sufficiency. Buchan (1980) reported particularly on Gordon's ideologies and approaches in assisting economic developments.

The cotton culture advanced in trial to supplement its growth but culminated a negative result and was rejected for opportunity costs. An alternative with delight of the Colonial—Mauritius sugar sector was likely the premise as its status on performance seemed promising.

It is presumed at this point; former attempts were made in developing agriculture to meet the demand in economic growth as that of the sugar sector—emerging in 1862 with deprived productivity shown by domestic labourers and demand initiations for labour input coupling with performance efficiency capabilities.

The Governor's premise heightens to a commercial standpoint, as to uplift the sugar sector in Fiji at high labour capacities to increase production and enhance tonnages for a surplus. Traces of comparative advantage where labour resources were accessed through indentured systems promoted its guarantee. Colonial—India were a major source of the British labour reserve that were traded with goods or otherwise reasoned agreements for an arranged time on a yearly basis. With the sugar industry established in 1862 on Wa-ka-ya Island, a sample mill established a decade later in 1872, with cultivated area of 640 acres.

Whence the annexation proceeded in 1874, several small scaled mills were established at Savu-savu, Ta-ve-uni, and Raki-raki. The contents bring forth a chronology that begins from 1862 till 1877—15 years therein with indicators of deprived labour forces hence the introduction of indentured labourers two years later in 1879.

Governor Sir Author Gordon's ideology or hypothesis seems aligned to gaining consolation by uplifting labour forces in the sugar sector and has proved through trial a bountiful emblem for the future of Fiji's economy and development that would uphold independency away from her Britannic nurturing in the year 1970. Hibbert's (1997) interpretation of a strategic trade theory on comparative advantage— 'wherein international trade, each country possesses resources which have a higher value externally than in the domestic economy' is seen associated with practice in this occasion by Gordon, A. Sir.

The Governor's intentions of high volume sugar production in Fiji proceeded in 1877 and is the year that marked long-term sugar export and trade between Fiji and Britain. In pre—indentured labourism, in the year 1869 to 1877, four tonnes of sugar were the average exported annually to England.

By 1879 to 1888, eight tonnes of sugar were exported, mainly being the impact of the Governors labourism strategy. Yield of crude and refined sugar increased dramatically thereafter within 1888 to 1980—82 years. The achievements were uttered by the average quotas of 120,000 – 170,000 tonnes, regardless of interruptions in post Gordon-ic events; World War II, Britain's European Economic Community entry, and the Lomé convention, respectively distributed within 39 years from 1935 to 1974. Fiji's sugar sector—by the end of 2021, will become its 159th progressive age.

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3.2. Role of Bacteria in Sugar Losses and their Sanitary Measures.

3.2.1. Preamble: Stance on the Sector's Research Literature Deficit.

No analyses of microbial intervention were observed in the pursuit of gathering literature for proclamations. It suggests deficient research localisation on reductions of cane and sugar yield by cause of microorganisms or rather not is there a locus significantly consequential in the events of numerous constraints encountered among the epochs of the sector. The purpose of section—3.2 is to declare the possibilities of microbial factors that may reduce sugar declination if magnitudes of curiosity remain constant without intensifications beyond habitual domestic constraints.

3.2.1.1 Product of the Interaction between Bacteria and Sugar Contents.

The role of microbial invasion takes place during harvesting and begins an association with exposed wounds made from cutting (Solomon, 2009). There are various microbial species, but more drastic impact can be delivered by bacteria. This is probable to the beginning of the dissemination course of bacterial populations across the sugar network with possibilities of reducing its recovery. The body of production in post-harvest environments and the clarification of cane juice within the milling component provide niches for microbial flourishment (Mishra, et al., 2017). Within this scope, should there be capitalisation in assessments, research, and analytical transmissions for catalogue abundancies and elevation of the sector's literature deficit in the association between sugars and microorganisms.

Transparency of an interactive cycle surfaces at the level of harvesting and milling; representing the mode in which cane and bacteria interrelate to produce by-products that affect the quality of cane, recovery of sugar, juice, and quantity of yield. At the outset, Solomon (2009) indicates what seems as the first phase of sugar content and yield declinations. Cane wounds from the harvesting event is the site at which a diversity of microorganisms come into contact with the stalks. The bacterial species that plays the most significant loss of cane and sugars are known as Leuconostocs.

A scientist named *Cienkowski* discovered the cause of a slime outbreak in sugar factories during 1878 (Thunell, 1995). The bacterial organisms responsible for the cause, produced dextran slimes in sucrose solutions where the specialist named it *Ascococcos mesenteroides.* Thunell (1995) determined another scientist called Van Tiegghem who also analysed the same organism and presented its generic name as Leuconostoc.

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4. CHALLENGES & RECCOMENDATIONS

5. LIST OF WORDS USED.

British Crown
Beseech
Crippling
Compensate
Diminish
Foster-ing
Gordon-ic
Quota
Opportunity Cost
Lomé Convention
Expansionism
Unaccountability
Bountiful
Emblem
Metropolis
Apparent
Lumen
Successor
Dominion
Constitution
Governance
Verily
Bigotry
Elimination
Caveat
Demand
Proclaim
Labourism
Crude
Ideology
Culminate
Domestic Labourer
Enhance
Epochs

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